

## AMENDMENTS TO THE CLAIMS

This listing replaces all prior versions and listings of claims in the application:

1. (Currently amended) A distributed trading system for handling a plurality of order requests, each order request comprising parameters under which a participant will buy and/or sell a futures contract, the system comprising:

a messaging bus;

a validator coupled to the messaging bus and having a first interface for receiving order requests, wherein the validator implements processes for validating the order requests, and an interface generating a validated order message on the messaging bus related to validated orders;

a risk allocation value (RAV) component coupled to the messaging bus and having an interface for receiving validated order messages from the validator, wherein the RAV component implements processes for evaluating risk associated with an order should that order be completed and preventing completion on an order in response to the RAV component identifying an unacceptable position;

a match engine coupled to the messaging bus and having an interface for receiving validated acceptable order messages from the RAV component, wherein the match engine implements processes for matching orders based on the order-specified criteria; and

a persist component coupled to the messaging bus and having an interface for receiving messages related to orders and trades, wherein the persist component implements processes for persistently storing information related to orders and trades.

2. (Original) The system of claim 1 further comprising: a market data service component coupled to the messaging bus and having an interface for receiving messages related to orders and trades, wherein the market data service component implements processes for generating market data related to orders and trades handled by the distributed trading system.

3. (Original) The system of claim 1 wherein the RAV component evaluates risk based on active orders, positions and margins for a particular customer placing the order.

4. (Original) The system of claim 1 wherein the messaging bus comprises a subscriber publisher messaging bus.

5. (Original) The system of claim 1 wherein the match engine is configured specifically for a particular class of futures contracts and receives validated order messages only when they related to the particular class of futures contracts.

6. (Currently amended) The system of claim 5 wherein the particular class of futures contracts comprise a contract cluster, and wherein responsive to contract clusters being identified, requiring the match engine to consider two or more contracts simultaneously to determine matches.

7. (Original) The system of claim 1 wherein the match engine publishes messages related to executed trades that are subscribed to by the persist component.

8. (Original) The system of claim 1 wherein the match engine publishes messages related to unmatched orders that are subscribed to by the persist component.

9. (Original) The system of claim 1 wherein the validator subscribes to messages related to market state, and the validator further comprises processes for using the market state to validate orders.

10. (Original) The system of claim 10 wherein the market state messages include information selected from the group consisting of: exchange active, contract active, markets open, user assigned to account, and high/low limits.

11. (Original) The system of claim 1 wherein the messages are self-describing.

12. (Original) The system of claim 1 wherein the messages comprise XML messages.

13. (Currently amended) A method for implementing trades on an electronic exchange, the method comprising the acts of:

- providing a messaging bus;
- receiving an order request in a first component, wherein the order request specifies parameters under which a participant will buy and/or sell a futures contract;
- validating the order requests;
- generating a validated order message on the messaging bus related to validated order request when the order request satisfies pre-specified validation criteria;
- receiving the validated order message in a second component,
- evaluating risk associated with the order represented in the validated order message;
- generating an accepted order message on the messaging bus when the evaluated risk satisfies pre-specified risk criteria;
- receiving the accepted order message in a third component;
- matching orders based on the order-specified criteria;
- generating an unmatched order message on the messaging bus;
- generating a trade message on the messaging bus corresponding to two or more matched orders; [[and]]
- receiving the messages related to unmatched orders and trades; [[and]]
- persistently storing information related to orders and trades[[.]]; proposing a settlement price for matched orders based on outside trade data;

and

publishing the proposed settlement price.

14. (Currently amended) The method of claim 13 wherein the validator further comprises processes for reporting errors back to a client.

15. (Currently amended) ~~A futures exchange including the distributed trading system of claim 1.~~ The method of claim 13 wherein the futures contract includes contract clustering and each contract cluster includes two or more related contracts and each contract cluster is given a unique cluster identification, and

wherein matching orders associated with one contract of a particular cluster identification includes simultaneous consideration of the two or more related contracts associated with the particular cluster identification.

16. (Currently amended) ~~The~~ A futures exchange of claim 15 including the distributed trading system of claim 1 and further comprising:

a trading floor operation producing a plurality of manually executed trades; and  
mechanisms for recording executed trades from the trading floor.

17. (Original) The futures exchange of claim 16 where the mechanisms for recording executed trades utilize at least some of the components of the distributed trading system.

18. (Original) A market data product comprising market data produced by the market data service component of claim 2.

19 (New) A distributed trading system for handling a plurality of order requests, each order request comprising parameters under which a participant will buy and/or sell a futures contract, the system comprising:

a messaging bus;

a validator coupled to the messaging bus and having a first interface for receiving order requests, wherein the validator implements processes for validating the order requests, and an interface generating a validated order message on the messaging bus related to validated orders;

a risk allocation value (RAV) component coupled to the messaging bus and having an interface for receiving validated order messages from the validator, wherein the RAV component implements processes for evaluating risk associated with an order should that order be completed;

a match engine coupled to the messaging bus and having an interface for receiving validated acceptable order messages from the RAV component, wherein the match engine implements processes for matching orders based on the order-specified criteria;

a persist component coupled to the messaging bus and having an interface for receiving messages related to orders and trades, wherein the persist component implements processes for persistently storing information related to orders and trades; and

a settlement component coupled to the persist component and having an interface for receiving orders matched by the match engine and an interface for receiving trade data, wherein the settlement component calculates a proposed settlement price and submits the proposed settlement price for publication.

20. (New) The system of claim 19, wherein the RAV component is further operative for implementing processes which prevent completion on an order in response to the RAV component identifying an unacceptable position.

21. (New) The system of claim 19 further comprising: a market data service component coupled to the messaging bus and having an interface for receiving messages related to orders and trades, wherein the market data service component implements processes for generating market data related to orders and trades handled by the distributed trading system.

22. (New) The system of claim 19 wherein the RAV component evaluates risk based on active orders, positions and margins for a particular customer placing the order.

23. (New) The system of claim 1 wherein the messaging bus comprises a subscriber publisher messaging bus.

24. (New) The system of claim 19 wherein the match engine is configured specifically for a particular class of futures contracts and receives validated order messages only when they related to the particular class of futures contracts.

25. (New) The system of claim 19 wherein the particular class of futures contracts comprise a contract cluster, and wherein responsive to contract clusters being identified, requiring the match engine to consider two or more contracts simultaneously to determine matches.